

In the Claims

We claim:

Claims 1-29 (Cancelled)

Claim 30 (New): A composition of matter, comprising:

(a) a polypeptide comprising an amino acid sequence that is at least 90% identical to the amino acid sequence recited in SEQ ID NO:20 or SEQ ID NO:22; or

(b) a polypeptide comprising two amino acid sequences (a') and (b'), wherein:

(a') is an amino acid sequence at least 90% identical to:

(i) the amino acid sequence of SEQ ID NO:20 or SEQ ID NO:22; or

(ii) a fragment of the amino acid sequence of SEQ ID NO:20 or SEQ ID NO:22, having the activity thereof; or

(iii) a functional equivalent of (i) or (ii); and

(b') is a heterologous amino acid sequence comprising a component selected from the group consisting of: a signal sequence, purification tag, the extracellular domain of a membrane-bound protein, a secreted protein, a starting methionine, a linker region containing a recognition site for an endopeptidase, and the Fc region from an immunoglobulin; or

(c) a polypeptide comprising an amino acid sequence selected from the group consisting of SEQ ID NO:20, SEQ ID NO:22, SEQ ID NO:27, SEQ ID NO:28; or

(d) a polypeptide that is a functional equivalent of (b), characterized in that it is homologous to the amino acid sequence of SEQ ID NO:20 or SEQ ID NO:22 and has activity as an antagonist of cytokine expression and/or secretion; or

(e) a polypeptide comprising the amino acid sequence of SEQ ID NO:29 or SEQ ID NO:30; or

(f) a polypeptide consisting of the amino acid sequence of SEQ ID NO:29 or SEQ ID NO:30; or

(g) a purified nucleic acid molecule encoding a polypeptide of any of (a) to (f); or

(h) the purified nucleic acid molecule of (g), comprising the nucleic acid sequence of SEQ ID NO:19, or SEQ ID NO:21, or a redundant equivalent or fragment thereof; or

(i) a purified nucleic acid molecule that hybridizes under high stringency conditions with the nucleic acid molecule of (g) or (h); or

(j) a vector comprising a nucleic acid molecule according to any one of (g) to (i); or

(k) a host cell transformed with a vector according to (j); or

(l) a pharmaceutical composition comprising a polypeptide that comprises an amino acid sequence at least 90% identical to the amino acid sequence SEQ ID NO:20 or SEQ ID NO:22, and a pharmaceutically acceptable carrier; or

(m) a pharmaceutical composition comprising the polypeptide according to any one of (a) to (f), and a pharmaceutically acceptable carrier; or

(n) a pharmaceutical composition comprising the nucleic acid molecule according to any one of (g) to (i), and a pharmaceutically acceptable carrier; or

(o) a pharmaceutical composition comprising the vector according to (j), and a pharmaceutically acceptable carrier; or

(p) a pharmaceutical composition comprising the host cell according to (k), and a pharmaceutically acceptable carrier; or

(q) the pharmaceutical composition according to any one of (m) to (p), further comprising an additional therapeutic agent, which is a cytokine antagonist or an anti-inflammatory agent; or

(r) a transgenic non-human animal that has been transformed to express a polypeptide according to any one of (a) to (f).

Claim 31 (New): A method of using a composition of matter, comprising providing a composition of matter according to claim 30 and using said composition of matter in a method selected from the group consisting of: diagnosing a disease in a patient; treatment of a disease in a patient; and identification of a compound that is a ligand for SEQ ID NO:20 or SEQ ID NO:22.

Claim 32 (New): The method of claim 31, wherein said method of using a composition of matter comprises the method for treatment of a disease, comprising administering to the patient:

(a) a polypeptide comprising an amino acid sequence that is at least 90% identical to the amino acid sequence recited in SEQ ID NO:20 or SEQ ID NO:22; or

(b) a polypeptide comprising two amino acid sequences (a') and (b'), wherein:

(a') is an amino acid sequence at least 90% identical to:

(i) the amino acid sequence of SEQ ID NO:20 or SEQ ID NO:22; or

(ii) a fragment of the amino acid sequence of SEQ ID NO:20 or SEQ ID NO:22, having the activity thereof; or

(iii) a functional equivalent of (i) or (ii); and

(b') is a heterologous amino acid sequence comprising a component selected from the group consisting of: a signal sequence, purification tag, the extracellular domain of a membrane-bound protein, a secreted protein, a starting methionine, a linker region containing a recognition site for an endopeptidase, and the Fc region from an immunoglobulin; or

(c) a polypeptide comprising an amino acid sequence selected from the group consisting of SEQ ID NO:20, SEQ ID NO:22, SEQ ID NO:27, SEQ ID NO:28; or

(d) a polypeptide that is a functional equivalent of (b), characterized in that it is homologous to the amino acid sequence of SEQ ID NO:20 or SEQ ID NO:22 and has activity as an antagonist of cytokine expression and/or secretion; or

(e) a polypeptide comprising the amino acid sequence of SEQ ID NO:29 or SEQ ID NO:30; or

(f) a polypeptide consisting of the amino acid sequence of SEQ ID NO:29 or SEQ ID NO:30; or

(g) a purified nucleic acid molecule encoding a polypeptide of any of (a) to (f); or

(h) the purified nucleic acid molecule of (g), comprising the nucleic acid sequence of SEQ ID NO:19, or SEQ ID NO:21, or a redundant equivalent or fragment thereof; or

(i) a purified nucleic acid molecule that hybridizes under high stringency conditions with the nucleic acid molecule of (g) or (h); or

(j) a vector comprising a nucleic acid molecule according to any one of (g) to (i); or

(k) a host cell transformed with a vector according to (j); or

(l) a pharmaceutical composition comprising a polypeptide that comprises an amino acid sequence at least 90% identical to the amino acid sequence SEQ ID NO:20 or SEQ ID NO:22, and a pharmaceutically acceptable carrier; or

(m) a pharmaceutical composition comprising the polypeptide according to any one of (a) to (f), and a pharmaceutically acceptable carrier; or

(n) a pharmaceutical composition comprising the nucleic acid molecule according to any one of (g) to (i), and a pharmaceutically acceptable carrier; or

(o) a pharmaceutical composition comprising the vector according to (j), and a pharmaceutically acceptable carrier; or

(p) a pharmaceutical composition comprising the host cell according to (k), and a pharmaceutically acceptable carrier; or

(q) the pharmaceutical composition according to any one of (m) to (p), further comprising an additional therapeutic agent, which is a cytokine antagonist or an anti-inflammatory agent.

Claim 33 (New): The method of claim 32, wherein the disease is selected from the group consisting of an auto-immune disease, viral liver disease, acute liver disease, skin disease, and inflammatory disease.

Claim 34 (New): The method of claim 32, wherein the disease is alcoholic liver failure.

Claim 35 (New): The method of claim 32, wherein the polypeptide of (a) is administered to the patient, and wherein the disease is selected from the group consisting of an auto-immune disease, viral liver disease, acute liver disease, skin disease, and inflammatory disease.

Claim 36 (New): The method of claim 35, wherein said patient has previously received a cytokine antagonist or an anti-inflammatory agent.

Claim 37 (New): The method of claim 32, wherein the polypeptide of (a) is administered to the patient with a cytokine antagonist or an anti-inflammatory agent, and wherein the disease is selected from the group consisting of an auto-immune disease, viral liver disease, acute liver disease, skin disease, and inflammatory disease.

Claim 38 (New): The method of claim 31, wherein said method of using a composition of matter comprises the method for the identification of a compound that is a ligand for SEQ ID NO:20 or SEQ ID NO:22, comprising contacting the polypeptide according to any one of (a) to (f) with one or more compounds suspected of possessing binding affinity for said polypeptide, and selecting a compound that binds specifically to said polypeptide.

Claim 39 (New): A polypeptide comprising two amino acid sequences (a) and (b), wherein:

(a) is an amino acid sequence at least 90% identical to:

- (i) the amino acid sequence of SEQ ID NO:20 or SEQ ID NO:22; or
- (ii) a fragment of the amino acid sequence of SEQ ID NO:20 or SEQ ID NO:22, having the activity thereof; or
- (iii) a functional equivalent of (i) or (ii); and

(b) is a heterologous amino acid sequence comprising a component selected from the group consisting of: a signal sequence, purification tag, the extracellular domain of a membrane-bound protein, a secreted protein, a starting methionine, a linker region containing a recognition site for an endopeptidase, and the Fc region from an immunoglobulin.

Claim 40 (New): The polypeptide of claim 39, wherein said polypeptide consists of (a) and (b).

Claim 41 (New): The polypeptide of claim 39, wherein said polypeptide comprises an amino acid sequence selected from the group consisting of SEQ ID NO:20, SEQ ID NO:22, SEQ ID NO:27, and SEQ ID NO:28.